



State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

TC USEPA

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

217/524-3300

US EPA RECORDS CENTER REGION 5



1001596

May 2, 1997

CERTIFIED MAIL
P 344 343 939

Witco Corporation
Attn: Serin Rao
U.S. Route 24
P.O. Box 9
Mapleton, Illinois 61547

Re: 1438050006 -- Peoria County
Sherex Chemical Co., Inc.
ILD095792859
Date Received: December 3, 1996
Log No. 111-CA-2
RCRA Permit

Dear Mr. Rao:

The RCRA Facility Investigation (RFI) Phase I Report for the above-referenced facility submitted by Harding Lawson Associates has been reviewed by the Illinois EPA. The report is hereby approved subject to the following conditions and modifications:

1. Investigative efforts documented in the subject report addressed the following solid waste management units (SWMUs):

<u>SWMU NO.</u>	<u>NAME</u>
1	Flyash Pile
2	Drainage Ditch
3	Sludge Handling Area
4	Tote Bin Storage Area
5	Flyash Settling Pond (Pit)

2. It appears that no further soil investigations nor any soil remediation is necessary at SWMU 4.
3. It has been determined that no remediation of soils beneath the flyash or soil/flyash interface is necessary for SWMUs 1, 2, 3 and 5.
4. The proposal to remove Flyash and flyash mixed with soil from SWMUs 1, 2, 3, and 5, as proposed in Section 4 of the report, is hereby approved.

Printed on Recycled Paper

Should you have any questions regarding this matter, please contact Gregg Sanders, at 217/524-3308

Sincerely,

Edwin C. Bakowski, P.E., Manager
Permit Section
Bureau of Land

ECB:GS:bjh\972611S.WPD
JVM

Attachments: Certification Statement

cc: Harding Lawson Associates
USEPA Region V -- Hak Cho

The subject submittal indicates:

- a. Flyash is present to a depth of 2.5'-3' below grade surface (bgs) at Flyash Pile (SWMU #1).
 - b. Flyash is present to a depth of 1'-2' bgs at Drainage Ditch (SWMU #2).
 - c. Flyash is present to a depth of 6" bgs and mixed with soil to a depth of 5.5' bgs at sample location 3-1 at Sludge Handling Area (SWMU #3). The submittal also indicates in boring logs that the flyash/soil interfaces at locations 3-2, 3-3, 3-4, 3-5 and 3-6 respectively occur at 12" bgs, 12" bgs, 6" bgs, 2' bgs and 2.5' bgs.
 - d. Flyash is present to a depth of 12' beneath the Flyash Settling Pond (SWMU #5).
5. Confirmation that all flyash and flyash mixed with soil has been removed from each area may be made visually. Field notes and photographs must be utilized to document these inspections.
 6. Remediation activities at SWMUs 1, 2, 3 and 5 should be completed by August 1, 1997. When remediation is complete the owner or operator must submit to the Illinois EPA certification both by the owner or operator and by an independent registered professional engineer that SWMUs 1, 2, 3 and 5 have been remediated in accordance with the specifications in this approval letter. This certification should be received at the Illinois EPA by October 1, 1997. These dates may be revised if Witco finds that additional time is necessary to complete all required remediation activities and demonstrates to the Illinois EPA that it is attempting to complete closure in a timely manner.

The attached certification forms must be used. Signatures must meet the requirements of 35 Ill. Adm. Code Section 702.126. The independent engineer should be present at all critical, major points (activities) during the RFI. These might include soil sampling, soil removal, backfilling, final cover placement, etc. The frequency of inspections by the independent engineer must be sufficient to determine the adequacy of each critical activity.

The Illinois Professional Engineering Act (Ill. Rev. Stat., Ch. 111, par. 5105 et. seq.) requires that any person who practices professional engineering in the State of Illinois or implies that he (she) is a professional engineer must be registered under the Illinois Professional Engineering Act (par. 5101, Section 1). Therefore, any certification or engineering services which are performed for a RFI workplan in the State of Illinois must be done by an Illinois P.E.

Plans and specifications, designs, drawings, reports, and other documents rendered as professional engineering services, and revisions of the above must be sealed and signed by a professional engineer in accordance with par. 5119, Section 13.1 of the Illinois Professional Engineering Act.

To document all remediation activities, a Remediation Report should be developed and accompany the above certification. This report should include:

- a. An introductory and historical discussion of the project.
- b. A chronological discussion of the various activities associated with this remediation effort.
- c. The volume of waste, waste residue and contaminated soil (if any) removed. The term waste includes wastes resulting from decontamination activities.
- d. Scaled drawings showing the horizontal and vertical boundaries of the extent of the flyash and flyash mixed with soil removal efforts.
- e. Documentation of the confirmatory efforts required by Condition 5 above.
- f. A description of the method of waste handling and transport.
- g. Closure photo documentation of the remediation effort.

The original and two (2) copies of all certifications, logs, or reports which are required to be submitted to the Illinois EPA by the facility should be mailed to the following address:

Illinois Environmental Protection Agency
Division of Land Pollution Control -- #33
Permit Section
2200 Churchill Road
Post Office Box 19276
Springfield, Illinois 62794-9276

Should you have any questions regarding this matter, please contact Gregg Sanders, at 217/524-3308

Sincerely,



Edwin C. Bakowski, P.E., Manager
Permit Section
Bureau of Land

ECB:GS:bjh\972611S.WPD
JLW

Attachments: Certification Statement

cc: Harding Lawson Associates
USEPA Region V -- Hak Cho

Certification Statement
Remediation of SWMUs 1, 2, 3 and 5
Witco Corporation (Sherex)
Mapleton, Illinois

Log No. 111-CA-2

Upon completion of the remediation effort for SWMUs 1, 2, 3 and 5, this statement is to be completed by both a responsible officer of the owner or operator (as defined in 35 IAC 702.126) and by the registered professional engineer overseeing all work associated with the investigation. Submit one copy of the certification with original signatures and three additional copies.

Remediation of SWMUs 1, 2, 3 and 5 at the Witco Corporation facility in Mapleton, Illinois has been completed in accordance with the specifications in the approved plan and the Illinois EPA letter approving this effort. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

USEPA ID Number

Facility Name

Signature of Owner/Operator

Date

Name and Title

Signature of Registered P.E.

Date

Name of Registered P.E. and Illinois
Registration Number

Mailing Address of P.E.:

Registered P.E.'s Seal:

ECB:GS:bjh\972611S.WPD



State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

USEPA
Tack

Gary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

217/524-3300

February 1, 1996

Mr. Serin R. Rao
Witco Corporation
U.S. Route 24
P.O. Box 9
Mapleton, Illinois 61547

Re: 1438050006 -- Peoria County
Sherex Chemical Co., Inc.
X ILD095792859 D.2.1
Date Received: September 18, 1995
Log No. 111-CA-1
RCRA Permit

Dear Mr. Rao:

The RCRA Facility Investigation (RFI) Phase I Workplan for the above-referenced facility submitted by Harding Lawson Associates has been reviewed by this Agency. The workplan is hereby approved subject to the following conditions and modifications:

1. This RFI Phase I Workplan shall be carried out to investigate for possible releases from the following solid waste management units (SWMUs):

Unit No.	Previous SWMU ID No.	Unit Name	Number of Sampling Location	Analytical Parameters
1	60	Flyash Pile	2	Cadmium (TCLP and Total)
2	63	Drainage Ditch	4	Cadmium (TCLP and Total)
3	New	Sludge Handling Area	6	Cadmium (TCLP and Total)
4	43 and 44	Tote Bin Storage Area	3	VOCs, Total Aluminum and pH
5	58	Flyash Settling Pond (Pit)	3	Cadmium (TCLP and Total)

2. A review of the proposed Phase I Workplan Sampling Plan has determined that the following modification should be made:
 - a. The Phase I proposed background sampling for Total Cadmium and Total Aluminum. If background sampling is desired, a minimum of 10 samples per soil stratum must be taken from an area not affected by onsite activities. Background sample locations and results are subject to Agency review and approval.
 - b. In the Tote Bin Storage Area Unit No. 4, two (2) soil samples shall be taken outside the curb area in order to confirm that hydrolysis waste streams stored in this area prior to the construction of the curb did not migrate from this area and impact surrounding soil. In addition, Appendix C of the Phase I Workplan indicates that volatile organics were present in this waste stream. Therefore, analysis of Method 8240 or 8260 Volatile Organic parameter shall also be required for soil samples collected for this unit.
3. RFI Phase I activities should be completed by July 1, 1996. Note: A revised workplan as proposed in Figure 2 of the workplan, is not necessary as the IEPA is in general agreement with the proposed workplan. When Phase I is complete, the owner or operator must submit to the Agency certification both by a responsible officer of the owner or operator and by an independent registered professional engineer that the facility completed Phase I in accordance with the specifications in the approved RFI Phase I workplan. In addition, a certification statement meeting the requirements of 35 IAC 702.126 must be provided by a responsible officer of the laboratory which conducted the chemical analyses that the requirements of this letter were met during the chemical analyses that the requirements of this letter were met during the chemical analysis of all samples. This certification must address the applicable sample collection, preservation, handling preparation and analytical requirements set forth in this letter. These certifications must be received at this Agency after completing Phase I, or by September 1, 1996. These dates may be extended if Witco Corporation (Sherex) submits information to the Agency indicating that it is attempting to complete the required activities in a timely manner but needs additional time to complete the investigation.

The attached certification forms must be used. Signatures must meet the requirements of 35 Ill. Adm. Code Section 702.126. The independent engineer should be present at all critical, major points (activities) during the RFI. These might include soil sampling, soil removal, backfilling, final cover placement, etc. The frequency of inspections by the independent engineer must be sufficient to determine the adequacy of each critical activity.

The Illinois Professional Engineering Act (Ill. Rev. Stat., Ch. 111, par. 5105 et. seq.) requires that any person who practices professional engineering in the State of Illinois or implies that he (she) is a professional engineer must be registered under the Illinois Professional Engineering Act (par. 5101, Section 1). Therefore, any certification or engineering services which are performed for a RFI workplan in the State of Illinois must be done by an Illinois P.E.

Plans and specifications, designs, drawings, reports, and other documents rendered as professional engineering services, and revisions of the above must be sealed and signed by a professional engineer in accordance with par. 5119, Section 13.1 of the Illinois Professional Engineering Act.

As part of the certification, to document the RFI Phase I activities at your facility, please submit a Phase I Report and Summary which includes, at a minimum:

- a. The information identified in Condition 10 below regarding the required soil sampling/analysis effort at each SWMU where such an investigation is necessary.
- b. Information which the workplan indicates will be in the report;
- c. A chronological summary of Phase I activities and the cost involved.
- d. Color photo documentation of Phase I activities.
- e. A general discussion of the activities which should be carried out as part of any required Phase 2 of the RCRA Facility Investigation.

The original and two (2) copies of all certifications, logs, or reports which are required to be submitted to the Agency by the facility should be mailed to the following address:

Illinois Environmental Protection Agency
Division of Land Pollution Control -- #33
Permit Section
2200 Churchill Road
Post Office Box 19276
Springfield, Illinois 62794-9276

4. All soil samples shall be analyzed individually (i.e., no compositing). Analytical procedures shall be conducted in accordance with Test Methods for Evaluating Solid Wastes, Third Edition (SW-846). When a SW-846 (Third Edition) analytical method is specified, all the chemicals listed in the Quantitation Limits Table for that method shall be reported unless specifically exempted in writing by the Agency. Apparent visually contaminated material within a sampling interval shall be included in the sample portion of the interval to be analyzed. To demonstrate a parameter is not present in a sample, analysis results must show a detection limit at least as low as the PQL for that parameter in the third edition of SW-846. For inorganic parameters, the detection limit achieved during the analysis of the TCLP extract must be at least as low as the RCRA Groundwater Detection Limits, as referenced in SW-846 (Third Edition) Volume 1A, pages TWO-29 and TWO-30, Table 2-15. Soil shall be sampled for the Analytical Parameters identified in the Table in Condition No. 1.

5. The following procedure must be utilized in the collection of all required soil samples:
 - a. The procedures used to collect the soil samples must be sufficient so that all soil encountered is classified in accordance with ASTM Method D-2488.
 - b. If a drill rig or similar piece of equipment is necessary to collect required soil samples, then:
 1. The procedures specified in ASTM Method D-1586 (Split Spoon Sampling) or D-1587 (Shelby Tube Sampling) must be used in collecting the samples.
 2. Soil samples must be collected continuously at several locations to provide information regarding the shallow geology of the area where the investigation is being conducted;
 - c. All soil samples which will be analyzed for volatile organic compounds (VOCs) must be collected in accordance with Attachment 7 of the Agency's RCRA closure plan instructions;
 - d. Soil samples not collected explicitly for VOC analysis should be field-screened for the presence of VOCs at all locations where VOCs are a concern;
 - e. All other soil samples must be collected in accordance with the procedures set forth in SW-846; and
 - f. When visually discolored or contaminated material exists within an area to be sampled, horizontal placement of sampling locations shall be adjusted to include such visually discolored and/or contaminated areas. Sample size per interval shall be minimized to prevent dilution of any contamination.
6. Quality assurance/quality control procedures which meet the requirements of SW-846 must be implemented during all required sampling/analysis efforts. In addition, sample collection, handling, preservation, preparation and analysis must be conducted in accordance with the procedures set forth in SW-846 and the requirements set forth in this letter.
7. Any equipment, including heavy earth movers or smaller tools, shall be scraped to remove any residue. Following this, the equipment must be steam cleaned and triple rinsed. All residues, wash and rinse water shall be collected and managed as a hazardous waste if analysis of the waste detects the presence of hazardous constituents or it exhibits a characteristic of hazardous waste. In any event the material must be managed as a special waste.

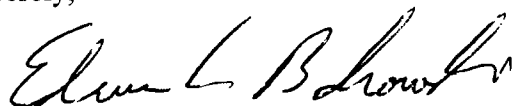
8. If the Agency's DLPC determines, based on the data obtained from the Phase I Workplan activities, that there has been no release of hazardous waste or hazardous constituents to the environment from a SWMU identified in Condition 1 above, then no further investigative action will be required for that SWMU. If the Agency's DLPC determines, based on the data, that there has been a release of hazardous waste or hazardous constituents to the environment or that the data is inconclusive, the Permittee will be notified by the Agency's DLPC.
9. The Health and Safety Plan contained in the subject workplan is neither approved nor disapproved. Under the provisions of 29 CFR 1910 (51 FR 15,654, December 19, 1986), cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations.
10. The portion of the final RFI Phase I report documenting the results of the required soil sampling/analysis effort must contain the following information, for each SWMU investigated:
 - a. A discussion of (1) the reason for the sampling/analysis effort conducted at each SWMU and (2) the goals of the sampling analysis effort conducted at each SWMU;
 - b. A scaled drawing showing the horizontal and vertical location where all soil samples were collected at each SWMU;
 - c. Justification for the locations from which soil samples were collected;
 - d. A description of the procedures used for:
 1. Sample collection;
 2. Sample preservation;
 3. Chain of custody; and
 4. Decontamination of sampling equipment.

- e. Visual classification of each soil sample collected for analysis;
- f. A discussion of the results of any field screening efforts;
- g. A description of the soil types encountered during the investigation, including scaled cross-sections;
- h. A description of the procedures used to analyze the soil samples, including:
 - 1. The analytical procedure used, including the procedures, if any, used to prepare the sample for analysis;
 - 2. Any dilutions made to the original sample;
 - 3. Any interferences encountered during the analysis of each sample; and
 - 4. The practical quantitation limit achieved, including justification for reporting PQLs which are above those set forth in SW-846.
- i. A description of all quality control/quality assurance analyses conducted, including the analysis of lab blanks, trip blanks and field blanks;
- j. A description of all quality assurance/quality control efforts made overall;
- k. A summary of all analytical data, including QA/QC results, in tabular form;
- l. Copies of the final laboratory sheets which report the results of the analyses, including final sheets reporting quality assurance/quality control data;
- m. Colored photographs documenting the sampling effort; and
- n. A discussion of the collected data. This discussion should identify those sample locations where contaminants were detected and the concentrations of the contaminants. Conclusions which can be drawn from the information compiled should also be included in this discussion.

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Should you have any questions regarding this matter, please contact Karen Natchwey at 217/524-3273.

Sincerely,



Edwin C. Bakowski, P.E., Manager
Permit Section
Bureau of Land

ECB:KEN:bjh\963422.WPD

Attachments: RFI Phase I Certification
RFI Phase I Laboratory Certification Statement

cc: USEPA Region V -- Hak Cho

Certification Statement
Phase I of the RCRA Facility Investigation
Witco Corporation
Mapleton, Illinois

Log No. B-111-CA-1

Upon completion of Phase I of the RFI, this statement is to be completed by both a responsible officer of the owner or operator (as defined in 35 IAC 702.126) and by the registered professional engineer overseeing all work associated with the investigation. Submit one copy of the certification with original signatures and three additional copies.

RFI Phase I activities at the facility described in the RFI Phase I Workplan have been completed in accordance with the specifications in the approved RFI Workplan. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

USEPA ID Number

Facility Name

Signature of Owner/Operator

Date

Name and Title

Signature of Registered P.E.

Date

Name of Registered P.E. and Illinois
Registration Number

Mailing Address of P.E.:

Registered P.E.'s Seal:

ECB:KEN:bjh\963422.WPD

Laboratory Certification Statement
Phase I of the RCRA Facility Investigation
Witco Corporation (Sherex)

Log No. B-111-CA-1

Upon completion of Phase I of the RFI, this statement is to be completed by both a responsible officer of the owner or operator (as defined in 35 IAC 702.126) and (2) a responsible officer (as defined in 35 IAC 702.126) of the laboratory which conducted the chemical analyses required as part of Phase I of the RFI. The original of this statement shall accompany the original certification statement for the overall Phase I activities and the RFI Phase I Report.

The sample collection, handling, preservation, preparation and analysis conducted as part of Phase I of the RFI at the facility described in this document has been conducted in accordance with the specifications in the approved workplan. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

USEPA ID Number

Facility Name

Signature of Owner/Operator Date

Name and Title of Owner/Operator
Representative

Name of Laboratory

Signature of Laboratory Date
Responsible Officer

Mailing Address of Laboratory:

Name and Title of Laboratory Responsible
Officer

ECB:KEN:bjh\963422.WPD